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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/768,344	01/30/2004	Simon Garry Moore	1010.69525	6373
24978	7590	06/15/2006	EXAMINER	
GREER, BURNS & CRAIN 300 S WACKER DR 25TH FLOOR CHICAGO, IL 60606			KENNEDY, JOSHUA T	
			ART UNIT	PAPER NUMBER
			3679	

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/768,344	MOORE, SIMON GARRY	
	Examiner	Art Unit	
	Joshua T. Kennedy	3679	JK

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-16 and 19-21 is/are pending in the application.
- 4a) Of the above claim(s) 2, 3, 6, 8, 11, 13, 14, 19 and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 5, 7, 10, 12, 15, 16 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 May 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

Claims 9, 17, 18, and 22-24 have been cancelled.

Claims 2, 3, 6, 8, 11, 13, 14, 19, and 21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on 7/8/2005.

Claims 1, 4, 5, 7, 10, 12, 15, 16, and 20 have been examined.

### ***Election/Restrictions***

It is now recognized that Figures 4 and 5 are drawn to patentably distinct species and thus an election is now required as set forth below:

Species I drawn to Figure 4

Species II drawn to Figure 5

The species are independent or distinct and merit a further division, because the connector of Species I encompasses an inserted rod to facilitate the connection, wherein, the connector of Species II is placed within two separate ends of hollow shafts to facilitate the connection.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1, 4, 7, 10, 15, and 16 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

During a telephone conversation with Mr. Lawrence Crain and Mr. Christopher McGeehan on 5/26/2006 a provisional election was made without traverse to prosecute the invention of Species I, claims 1, 4, 5, 7, 10, 12, 15, 16, and 20. Affirmation of this election must be made by applicant in replying to this Office action. Claim 8 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "at least one seal that itself is configured to stop any leakage of material from within a secured article" (Claim 12, Lines 2-3) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 4, 5, 7, 10, 12, 15, 16, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, specifically referring to the combination/subcombination of the securing apparatus and releasing tool.

It is unclear how the releasing tool is a limitation of the coupling apparatus since it is only present when one wants to “unlock” the connection. How does this serve to limit the apparatus when one is establishing and maintaining the connection? Applicant is improperly attempting to define the securing apparatus in terms of a separate, unclaimed releasing tool.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,4,5,7,10,12,16, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Howard (US Patent 3,473,202).

As to Claim 1. Howard discloses a securing apparatus comprising:

a deformable body (A), wherein the body is configured to provide a secure interference fit with at least one article to which it is fitted (Col 1, Lines 35-43), and

an aperture within the body (13), wherein the aperture is configured to accept a releasing tool (14),

wherein the securing apparatus is only unlocked by the operation of the releasing tool with respect to the body and remains locked at all other times, where the securing apparatus is fully unlocked by the operation of the releasing tool with respect to the

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body and is locked at all other times upon removal of the releasing tool (Col 1, Lines 35-43; Examiner considers the securing apparatus to be “fully unlocked” when the releasing tool opens the collar to allow a shaft to be placed within the collar; Subsequently, the releasing tool is considered to be “removed” once it is completely backed out of contact with the abutting face (11'), causing the collar/body to be locked on the shaft) and the absence of the releasing tool from the aperture ensures that the securing device is in a locked position by default (Col 1, Lines 39-41).

As to Claim 4. Howard discloses the body joining a plurality of articles together (Fig 4).

As to Claim 5. Howard discloses the body containing at least one slot (12) that is substantially perpendicular to the aperture and which bisects at least one side of the aperture (Fig 1).

As to Claim 7. Howard discloses the body containing a plurality of apertures (10, 13, 16, 23).

As to Claim 10. Howard inherently discloses the dimensions of the body of the securing device when the releasing tool is not operated are such that the securing apparatus cannot be connected to the article to which it is to be secured (Col 1, Lines 35-43).

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As to Claim 12. Howard discloses the body is configured to include at least one seal (B) that itself is capable of stopping any leakage of material from within a secured article.

As to Claim 16. Howard discloses at least one article to be secured being solid (Claim 1, Line 1).

As to Claim 20. Howard discloses the aperture (13) containing a threaded section (Col 2, Line 44) that is configured so that the securing apparatus is unlocked by inserting the releasing tool (14) into threaded section of the aperture to a point where the required widening of an area of the aperture is achieved (Col 1, Lines 35-43; Col 2, Lines 44-46).

It is well established that a recitation with respect to the manner in which an apparatus is intended to be employed, *i.e.*, a functional limitation, does not impose any structural limitation upon the claimed apparatus which differentiates it from a prior art reference disclosing the structural limitations of the claim. In re Pearson, 494 F.2d 1399, 181 USPQ 641 (CCPA 1974); In re Casey, 370 F.2d 576, 152 USPQ 235 (CCPA 1967); In re Otto, 312 F.2d 937, 136 USPQ 458 (CCPA 1963). Where the prior art reference is inherently capable of performing the function described in a functional limitation, such functional limitation does not define the claimed apparatus over such prior art reference, regardless of whether the prior art reference explicitly discusses such capacity for performing the recited function. In re Ludtke, 441 F.2d 660, 169 USPQ 563 (CCPA 1971). In addition, where there is reason to believe that such functional limitation may be an inherent characteristic of the prior art reference,



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Applicant is required to prove that the subject matter shown in the prior art reference does not possess the characteristic relied upon. In re Spada, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Cir. 1990); In re King, 801 F.2d 1324, 1327, 231 USPQ 136, 138 (Fed. Cir. 1986); In re Ludtke, 441 F.2d at 664, 169 USPQ at 566 (CCPA 1971); In re Shreiber, F.2d at, 44 USPQ2d 1429 (Fed. Cir. 1997).

The prior art laid forth shows all of the structural elements claimed and is inherently capable of performing the functions as claimed. If applicant claims that it cannot, they need to review the claims to ensure that they have all of the necessary structural elements recited.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Howard.

Howard does not explicitly disclose at least one article to be secured being tubular, but discloses a "prestressed shaft gripping element." (Claim 1, Line 1). It would be obvious to one of ordinary skill in the art to utilize a tubular element as the shaft because this equivalent substitution would lead to a reduction of weight of the shaft being used regardless of application.

***Response to Arguments***

Applicant's arguments filed 5/5/2006 have been fully considered but they are not persuasive.

As to Claims 1, 4, 5, 7, 10, 12, 15, 16, and 20 Applicant argues:

*"At no point does Howard disclose or suggest that screw 14 can be removed out of the hole."*

Examiner respectfully disagrees. In Column 1, Lines 40-41, Howard states "the shaft is locked in place by backing the spreading screw out of the threaded hole".

Also, Claim 1 only actively recites a deformable body having an aperture capable of accepting a releasing tool. Secondly, there is no structure to support the "wherein" clause that distinguishes from Howard since the releasing tool is not positively claimed. Thirdly, the argument regarding "fully locked or fully unlocked" state is not commensurate with the scope of the claims or the disclosure. It does not depend on whether or not the releasing tool is inserted, rather depends on the operation of the releasing tool. It is also noted on page 17, lines 3-5 of the instant disclosure that the releasing tool can be partially removed, hence "retained in the collar during use to adjust tension on the unit". Also, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. As stated

in the rejection above, Examiner considers the securing apparatus to be "unlocked" when the releasing tool opens the collar to allow a shaft to be placed within the collar and the removal of the releasing tool can be considered to occur once it is completely backed out of contact with the abutting face, causing the collar/body to be locked on the shaft, thus performing the intended use of fully unlocking and locking the securing apparatus.

Applicant additionally argues:

*"the presently claimed releasing tool is fully removable from the securing apparatus... absence of the tool indicates that the apparatus is locked."*

Examiner respectfully disagrees. The releasing tool is **not** positively claimed in any of the claims and attention again is brought to Column 1, Lines 40-41 where Howard discloses the shaft being locked in place by backing the spreading screw out of the threaded hole.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua T. Kennedy whose telephone number is (571) 272-8297. The examiner can normally be reached on M-F: 7am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JTK

JTK

5/30/2006



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